



## **On-Board Diagnostics (OBD) Test Frequently Asked Questions**

***Beginning in July 2002, the Maryland Vehicle Emissions Inspection Program (VEIP) will begin OBD testing of 1996 and newer model year vehicles at all of our State stations.***

### **What is OBD and how does it work?**

OBD is an acronym for On-Board Diagnostics. The OBD system consists of one or more computers installed in 1996 model year and newer vehicles that monitor emissions control components in the vehicle's engine, transmission, evaporative system, and exhaust system. If an OBD monitor detects a problem that might cause the vehicle's emissions to exceed allowable limits, a "check engine," or similar warning light is illuminated on the dashboard to alert the driver that something is wrong with the vehicle.

### **Why do we need OBD testing?**

OBD testing is designed to alert motorists of real or potential problems with the vehicle's on-board emissions control systems, and encourage motorists to fix their vehicles when the "check engine" or similar warning light comes on. Some motorists may ignore the light, and others may not be aware of what the warning light means. OBD testing identifies those vehicles that have the warning light on in order that they get repaired before their emissions exceed allowable limits.

### **How do I know if my car has OBD?**

Model year 1996 and newer light duty vehicles, with a gross vehicle weight rating (GVWR) of 8,500 lbs or less, are generally equipped with OBD. Your owner's manual, or an emissions label under the hood, usually indicates if your vehicle has OBD. A "check engine" or similar warning light on the dashboard should go on, then off, when you start your vehicle's engine.

### **What is the MIL?**

The MIL is an acronym for Malfunction Indicator Light. The MIL is the technical term used for the "check engine" or similar warning light that appears on the dashboard.

## **Why are only 1996 and newer vehicles being OBD tested?**

Even though OBD was installed on some 1994 vehicles, it wasn't until 1996 that all manufacturers began using standardized OBD equipment in their vehicles that enabled repair facilities to efficiently diagnose and test most makes and models of vehicles using scan test tools. Before 1996, standardized OBD equipment was not installed in vehicles.

## **What is the difference between the OBD and the IM240 treadmill tests?**

The IM240 treadmill test measures the concentration of gasses coming from the vehicle's exhaust pipe. The OBD test is an electronic type test that uses a scan test tool plugged into the vehicle's computer through a connector mounted under the dashboard to determine if components are failing that might cause the vehicle emissions to exceed allowable limits.

## **Does that mean we don't need to test vehicles using IM240 anymore?**

No. 1984 through 1995 model year vehicles up to 10,000 pounds Gross Vehicle Weight Rating (GVWR) that do not have OBD systems will continue to receive the IM240 test.

## **Why must I take the OBD test if my "check engine" light is not on?**

The complete test is given to ensure that the MIL is working properly and that all required OBD monitors have tested their emission systems or components.

## **What are fault codes?**

Fault codes, also known as diagnostic trouble codes (DTC), appear during the OBD test when a vehicle problem exists that may cause the MIL to come on. The codes indicate what component or emissions system is causing the problem and can be used by repair technicians to make cost effective repairs. If your vehicle has active DTCs, they will be recorded along with the test results on the OBD Diagnostic Report given to you along with the Vehicle Emissions Inspection Certificate.

## **My "check engine" light is on, but my car is running fine. What should I do?**

**If the MIL is flashing, take the vehicle to a repair facility as soon as possible to avoid major damage to your vehicle.** If the MIL is not flashing, and you don't notice any changes to the engine's performance, drive the vehicle in a normal manner for one week to see if the problem corrects itself and turns the MIL off. If the MIL stays lit after a week of normal driving, take it to a dealership or repair facility to fix the problem. Read your owner's manual for further information on your vehicle's OBD system.

## **My "check engine" light came on but then went out after a few days. What does that mean?**

Some problems that turn on the MIL may correct themselves. If the computer does not detect the original problem that caused the light to go on after a certain number of driving trips, the MIL will go out.

## **If my "check engine" light is on, and the car is running OK, why not wait until my car needs to be tested before getting the light turned off?**

Any condition that causes the MIL to stay on beyond one week of normal driving should be fixed before it creates more serious problems that may cost much more to have fixed later.

## **My car was fixed, but the "check engine" light came on again after one day. Why would that happen?**

There are many reasons for a MIL to come on again following repairs. A new problem may have occurred after the vehicle was fixed. A "sub problem" to the original problem could appear after the larger problem was corrected. Non original equipment manufacturer (OEM) specification parts may have been installed for the repairs. The original problem was not totally fixed.

## **Are OBD related repairs covered by a warranty?**

Depending on the age and mileage of your vehicle, emission repairs may be covered by the manufacturer. Federal law requires that the on-board computer and catalytic converter on 1995 and later model year vehicles be warranted for 8 years or 80,000 miles. See your dealership or call the manufacturer's customer service department for warranty information.

## **Why was my car refused OBD testing for not being ready?**

When an OBD scanner test tool is plugged into your vehicle, the monitors in the vehicle's computers send messages to the test tool indicating whether they are "ready" or "not ready" for OBD testing. If a monitor does not have enough information to pass or fail its assigned emissions component or system in the vehicle, a "not ready" or "incomplete" message is sent to the test tool. If too many monitors are set to "not ready," a pass/fail OBD test decision cannot be made on your vehicle.

## **What do I do if my car fails an OBD test?**

Take the vehicle to a repair facility that has diagnostic test equipment for making OBD repairs. Most repair facilities and dealerships have such equipment. Give the service writer or repair technician a copy of your OBD Test results and Diagnostic Report which lists the reasons your vehicle failed and will aid the technician when making repairs.

## **Can the State's test tool put a virus in my car's computer?**

No. The test tool can only read information from your vehicle's computers. The test tool cannot input data to the computer.

